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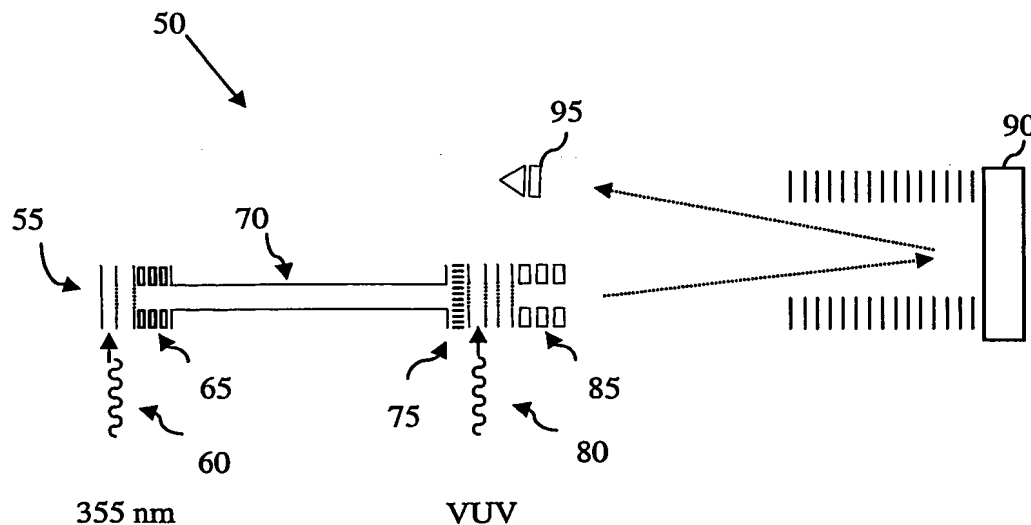
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(54) Title: METHODS AND APPARATUS FOR MASS SPECTRAL ANALYSIS OF PEPTIDES AND PROTEINS



(57) Abstract: Apparatus, device, and methods for fragmenting high molecular weight molecular ions, such as peptides or proteins, by treating the ions with predetermined wavelengths of light are described. Vacuum ultraviolet radiation as a source of predetermined wavelengths of laser light is described in one embodiment. A device (50) is described having a sample, such as a peptide, protein, protein digest, and the like enters through inlet (55) and is irradiated with a first source of light (60), which illustratively may be a laser light. The first source of laser light is illustratively at a wavelength and energy sufficient to convert molecules in the sample into molecular or precursor ions.



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